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Agile, meet design thinking

Get better experiences to market faster

IBM Institute for Business Value

First impressions matter

To compete in today's rapid-fire world, organizations are pressured to bring high quality, differentiated products and services to market quickly. But the push to "get something out there" can lead to experiences that aren't relevant to real customer needs. If you miss the mark, you may not get a second chance. Traditionally, designers and developers have had to operate within isolated functional areas. By building multidisciplinary teams and combining a design thinking approach with agile methodologies, you can release efficiently and increase the likelihood that a customer's first impression will be a good one.

Why agile and design thinking are made for each other

Agile and design thinking methods both contain principles, frameworks and defined sets of roles and activities. When thoughtfully applied in concert, the two approaches can help teams align and deliver differentiated solutions that drive growth and bring new value to consumers.

Agile development is a nimble process that relies on close teaming and customer collaboration to respond to market change rapidly. The goal is to get to market quickly and iterate with improvements, sometimes continuously. It's a common misconception that agile methods emphasize speed and flexibility at the expense of the customer experience. When agile development is executed properly, satisfying customers is a primary objective. However, if agile teams become overly focused on incremental improvements, they can lose sight of the impact their iterations will have on customer experiences. Design thinking can be helpful in this situation. Because it uses research techniques from social sciences like ethnography and psychology, design thinking can help uncover human needs and motivations. Design thinking also includes rapid prototyping methods that enable teams to test new ideas quickly.

When teams launch solutions that don't address customers' root issues and don't offer a better option than the competition, they risk disappointing and losing customers. But when development teams get it right, they can open up long-term revenue opportunities from repeat customers. According to Marketing Sherpa, consumers reward brands they like. Of satisfied customers, 61 percent are "very likely to make another purchase," compared to a mere 7 percent of unsatisfied customers who would.¹ This focus on customer satisfaction points to at least one reason why design-driven companies outperformed the S&P by 228 percent over 10 years.²

Incorporating the why and how

Design thinking takes an empathetic approach that puts the needs of users at the center of projects by asking questions about the specific challenges that need to be solved. It looks at the "why" of a problem, with a focus on generating fresh ideas that teams test with a series of user-focused exercises. With design thinking, the goal is to define a solution that satisfies users' real needs.

Agile methods focus on the "how" of project delivery, breaking up the planning and scope of work into smaller units. As projects develop, teams can make modifications based on real-time feedback from testing, iterating and continuously improving throughout the development process.

Marrying agile with design thinking

Finding the right balance between discovery (researching and understanding what customers desire and designing solutions to meet those needs) and delivery (coding, testing and deploying) has long been a challenge.³ The trick is to devise and manage a shared workflow that efficiently integrates both sets of activities. By integrating design thinking early in the process, teams can gather real-world customer insights that help them rally around a customer-centric vision, which can improve satisfaction. reduce risk and lower the need for costly redesign cycles later.⁴ According to a recent study conducted for IBM by Forrester Consulting, adopting a design thinking approach can reduce time for development and testing by as much as 33 percent.⁵

To harmonize design thinking and agile, each team member's focus must be on delivering great outcomes for users instead of on output-centric goals, such as number of products shipped or reduction in number of defects.⁶ For teams that haven't incorporated designers or design thinking before, implementing a "collaboration contract" is an important first step. The contract can be a quick activity where leaders and team members from the various disciplines agree upon and document how their multidisciplinary team operates. To ease the transition, it's useful to have an experienced design thinker available to coach teams on alignment issues. It's important that the entire team understands how the group will operate going forward in terms of task duration, changes and goals.

When an agile engine is powering a team's delivery schedule, tactics such as incremental sprint planning and backlog grooming can overpower project management and restrict a team's freedom to explore ambiguous questions and new methods. When attempting to incorporate design thinking into an existing project for the first time, teams may find it difficult to break through the agile rhythm. To address this issue, teams can start small by conducting "hybrid sprints," which embed design thinking activities and objectives into the agile sprint plan. By assigning design thinking tasks within a familiar sprint structure, strategic work, such as user research, doesn't get lost. Members also can see how design thinking helps connect human needs to business objectives. As agile team members mature in their design thinking practice, they may realize their agile stories haven't been considered or validated from a customer-centric perspective. To address this issue, some teams take a dualtrack approach, using a single, integrated team of designers and developers who balance their time between discovery and delivery (see Figure 1).⁷ Regardless of the project phase, it's possible to adopt a design thinking mindset. The change is accelerated when team members remain flexible and experiment with different workflows. Even before shipping new concepts to market, teams that integrate design thinking and agile practices can gain stronger alignment among stakeholders and capture higher quality, real-time feedback from customers.

Figure 1

Integrating design thinking into an agile workflow. Teams balance efforts across discovery and delivery to maximize user outcomes

sprints concurrent to or preceding

deliverv work.



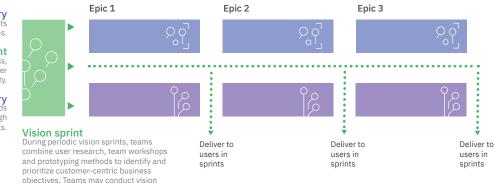
Continuous discovery This track generates customer insights and validates potential solutions.

Whole-team alignment Informed by discovery and delivery tracks, teams periodically demo new user experiences at increasing fidelity.



Continuous delivery

This track responds to customer needs with low fidelity prototypes and high fidelity production outputs.



Changing how people think about design

Design thinking and agile approaches can be used for everything from strategic visioning and planning to marketing campaign development and employee experience. However, adopting these problem-solving techniques means employees may have to change how they think about design. Organizations also may have to redefine the way teams work together. Organizations need to be committed to:

- Helping teams understand the difference between design craft and design thinking.
 Design thinking is for the whole team, not just designers. It takes a diverse set of skills to bring great experiences to customers.
- Training and governance across the enterprise, so these approaches aren't isolated to certain teams, business units or locales. Broad change won't happen if teams are practicing design thinking in a vacuum or on scattered innovation projects. Companies need to treat the approach as an essential, philosophical shift in their everyday business practices.

 Creating executive advocates. Senior leaders and managers have an important role to play in helping their teams adopt design thinking. They'll need to be ready to remove obstacles and empower teams to reach customercentered business objectives.

In innovative environments, designers and design thinkers are integral parts of agile teams and squads, instead of being disconnected from the development process in centralized design groups. Cross-organizational teams have a more comprehensive understanding of business requirements and customer needs, helping them make informed decisions for their customer experience.

Continuous change isn't going to change

The need to continually respond to rising customer demands isn't going away. By incorporating principles from both design thinking and agile, teams can rapidly generate new ideas and embrace the type of user-centered innovation that can transform businesses. As you look at integrating this hybrid approach into your organization, consider these questions.

- Are your teams thinking about how customer experience affects your bottom line and incremental key performance indicators (KPIs) throughout the customer journey? Or do they still believe that design is something "fluffy" to be applied late in a project cycle?
- 2. Is the practice of customer experience and design thinking in your company limited to a small group of designers or researchers? How can you ensure these skills are part of the whole multidisciplinary team at the onset of projects?

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Notes and sources

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